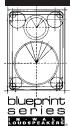
PRELIMINARY TECHNICAL DATA SHEET









HD HIGH DEFINITION — Designed for superior sonic quality and durability.

SPECIFICATIONS

FREQUENCY RESPONSE Plus or minus 3 dB

HD-525: 55 Hz to 21 kHz HD-650: 45 Hz to 21 kHz HD-800: 35 Hz to 21 kHz

RECOMMENDED

AMPLIFIER POWER HD-525: 10 to 100 watts HD-650: 10 to 125 watts HD-800: 10 to 150 watts

SENSITIVITY 88 dB 2.83V @ 1 meter.

IMPEDANCE 6 ohm nominal

<u>HEIGHT X WIDTH</u> (With frame)

HD-525: 97/8" x71/8" HD-650: 11 11/16" x 8 3/4" HD-800: 10 3/16" x 14 1/4"

HOLE CUTOUT

HD-525: 61/4" x 9" HD-650: 7 5/8" x 10 5/8" HD-800: 9 1/8" x 13 1/8"

DEPTH BEHIND WALL (Assumes 1/2" drywall) HD-525: 2 1/2" HD-650: 2 15/16" HD-800: 3 1/8"



BLENDING HIGH FIDELITY AND ARCHITECTURE®





HD-525

- 5 1/4" Mica-Filled Polypropylene Woofer with Inverted Butyl Rubber Suspension
- 1" ElastoDynamic[™] Wide **Dispersion** Tweeter
- Complete System consists of: HD-525 Speaker; 525 Bracket Kit and 525 Frame/Grille Kit

HD-650

- 6 1/2" Mica-Filled Polypropylene Woofer with Inverted Butyl Rubber Suspension
- 1" ElastoDynamic[™] Wide Dispersion Tweeter
- · Complete System consists of: HD-650 Speaker; 650 Bracket Kit and 650 Frame/Grille Kit

HD-800

- 8" Mica-Filled Polypropylene Woofer with Inverted Butyl Rubber Suspension
- 1" ElastoDynamic[™] Wide **Dispersion Tweeter**
- · Complete System consists of: HD-800 Speaker; 800 Bracket Kit and 800 Frame/Grille Kit

INTRODUCTION

The HD High Definition group offers loudspeakers designed for superior sonic quality and durability. They employ advanced technology components designed to extract all of the subtle nuances in recorded music or the thunderous action in a movie. They are perfect anywhere that quality of sound is the most important consideration.

FEATURES AND BENEFITS

 \bigcirc

Mica-Filled Polypropylene Woofers

The mica-filled polypropylene cone achieves new standards in transient speed and dynamic range because of its phenomenal rigidity and improved stiffness to mass ratio. The inverted butvl surrounds, the BumpBack[™] magnets and the rigid steel basket are all optimized for large excursions of the cone. In this way, each of the HD speakers deliver exceptionally deep and detailed bass at realistic sound pressure

levels, without the mechanically induced limiting and distortion of typical designs.

ElastoDynamic[™] Hybrid **Dome Tweeter**

Constructed from a composite matrix of elastomers and natural fiber substrates, the Elasto-Dvnamic[™] tweeter offers extended high frequency response without any harsh ringing or overshoot. Additionally, the elastomers offer the added benefit of weather resistance, making it uniquely suitable for use outdoors or in moist environments.

Acoustic Fine Tuning

An installer set "NORMAL/PRES-ENCE" control located behind the speaker baffle allows the speaker to be tuned to your particular room acoustics. You can adapt the sound for a room with lots of furniture, heavy drapes and wall to wall carpeting.

HD-525/HD-650/HD-800 High Definition Loudspeaker Group

FEATURES AND BENEFITS (CONTINUED)

Weather-Proof Construction

All of the drivers, the frames and the baffles are weatherproof. The aluminum grilles are rustproof and the mounting screws are all stainless steel.

Absolutely Flush to the Wall Appearance

The unique mounting system of the HD loudspeakers powerfully clamps the frame to the bracket, sandwiching the wall material between them. Because the clamping action is totally uniform around the frame there are no shadows or

APPLICATION NOTES

Wire ties on bracket

keep wire attached

throughout New

Construction

Model HD-800 Shown

Bracket

gaps between the wall and the frame. Additionally, the Niles mounting system is carefully optimized to stiffen the surrounding drywall and prevent it from resonating. You hear only the music, not the drywall.

Infrared Sensor Mount

The speaker baffle has a locator designed for the Niles MS-1 MicroSensor,[™] a miniature infrared sensor. The MS-1 installs discreetly behind the aluminum grille and therefore minimizes wall clutter in your home. When you want to control your equipment, you simply

point your remote control at the speaker with the MS-1 installed from up to 15 feet away.

X-Matrix[™] Reinforced Baffle

The X-Matrix Baffle design uses specially molded ribs to add rigidity to the baffle.The end result is better bass and improved midrange detail.

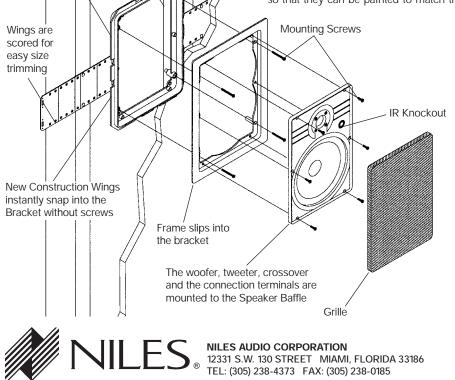
Six Ohm Impedance

HD speakers are designed to be placed in multi-room systems with many pairs of speakers. The six ohm impedance is a very easy electrical load for most amplifiers. This allows many pairs of HD speakers to be wired to a single amplifier using a Niles speaker selection system.

Low Diffraction, Paintable Aluminum or Cloth Grilles HD speakers are available with aluminum or cloth grilles. The painted rustproof aluminum grille has hundreds of precisely sized perforations, creating an acoustically transparent grille. The cloth grille is covered with a color coordinated acoustically transparent cloth.

Three Stage Installation System Prevents Theft and Simplifies Painting

You install only the parts you need for a particular stage of construction. When the framing and wiring are finished, you install the *bracket*. After the drywall is up, but before the painter begins to paint, you install the *frame* and provide the rustproof aluminum *grilles* to the painter so that they can be painted to match the



surroundings. Only when construction is completely finished do you put the valuable *speaker* in the wall.

Easy Retrofit Installation

Designed for ease of installation, the Niles mounting system makes retrofit installations simple and fast. A supplied template assures fast and accurate hole cutting. The bracket slips behind the drywall and the screws secure the bracket to the frame, sandwiching the drywall between them. The speaker baffle attaches to the frame, and the grille mounts over the speaker.

Instant Speaker Changes

An MP or BG speaker can be substituted for the HD, if the frame size is identical (e.g. HD-525 to BG-525). You can quickly change the speaker by removing the grille, undoing the mounting screws and replacing just the speaker baffles.

Hole Saving Bracket

New Construction Wings allow the Bracket to be installed as a "Hole Saver" before the drywall goes up. The drywall contractor cuts the hole in the drywall as it is installed, reducing the chances of misplaced wire.



www.nilesaudio.com

© 1999 Niles Audio Corporation. Note: Because Niles believes in constantly improving its products, Niles reserves the right to change product specifications without notice. Niles, the Niles logo and Blending High Fidelity and Architecture are registered trademarks of Niles Audio Corporation. Printed in USA DS00128A